# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/788,960 | 02/28/2004 | Chandrasekar Vemula | | 6670 |

7590    11/06/2009

Quantili, Inc.
800 Lake Manor Close
Alpharetta, GA 30022

| EXAMINER |
|---|
| BOSWELL, BETH V |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3623 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 11/06/2009 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on _28 February 2004_.

2a) ☐ This action is **FINAL**.          2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under _Ex parte Quayle_, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) _1-18_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-18_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTION

**Status:** This first office action is in response to Application No.10/788960

filed on February 28, 2004. Currently claims 1-18 are pending. This application

claims the benefit under 35 U.S.C. § 119(e) to U.S. Provisional Patent

Application Serial No. 60/451,239 filed on March 1, 2003.

**Examiner's Note:** The Examiner has pointed out particular references

contained in the prior art of record within the body of this action for the

convenience of the Applicant. Although the specified citations are representative

of the teachings in the art and are applied to the specific limitations within the

individual claim, other passages and figures may apply. Applicant, in preparing

the response, should consider fully the entire reference as potentially teaching all

or part of the claimed invention, as well as the context of the passage as taught

by the prior art or disclosed by the Examiner.

### *Claim Objections*

Claims 8, 10, and 14 are objected to because of the following informalities:

The claim does not comply with appropriate formatting i.e. each claim begins with

a capital letter and ends with a period. Periods may not be used elsewhere in the

claims except for abbreviations. See Fressola v. Manbeck, 36 USPQ2d 1211

(D.D.C. 1995). Where a claim sets forth a plurality of elements or steps, each

element or step of the claim should be separated by a line indentation, 37 CFR

1.75(i). (See MPEP 608.01(m)). Appropriate correction is required.

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 1-13 and 18** are rejected under 35 U.S.C. 101 because the claimed inventions are directed to non-statutory subject matter.

In order for a method to be considered a patent-eligible process under 35 U.S.C. 101, a claimed process must either: (1) be tied to a particular machine or apparatus or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under 35 U.S.C. 101 and is nonstatutory subject matter since the claim fails the **machine-or-transformation test**. There are two corollaries to this test: First, a mere field-of-use limitation is generally insufficient to render an otherwise ineligible method claim patent eligible i.e. the machine or transformation must impose meaningful limits on the claim's scope to pass the test. Second, insignificant extra-solution activity will not transform an unpatentable principle into a patentable process i.e. reciting a specific machine or a particular transformation of a specific article in an insignificant step such as a data gathering or outputting is not sufficient to pass the test. *See In re Bilski*, 545 F.3d943, 88 USPQ2d 1385 (Fed. Cir. 2008) and MPEP § 2106. Furthermore, mere recitations of the particular machine or apparatus in the preamble of the

claimed invention may not be sufficient to pass the test. See MPEP § 2111.02.

When amending claims, Applicant is reminded that nominal recitations of structure in an otherwise ineligible method fail to make the method a statutory process. See Benson, 409 U.S. at 71-72. As Comiskey recognized, "the mere use of the machine to collect data necessary for application of the mental process may not make the claim patentable subject matter." Comiskey, 499 F.3d at 1380 (citing In re Grams, 888 F.2d 835, 839-40 (Fed. Cir.1989)). Incidental physical limitations, such as data gathering, field of use limitations, and post-solution activity are not enough to convert an abstract idea into a statutory process. In other words, nominal or token recitations of structure in a method claim do not convert an otherwise ineligible claim into an eligible one.

**Claims 1-13** neither recite a substantive tie of the methods to a machine or apparatus nor transform underlying subject matter to a different state or thing in the bodies of the claims. As such, these claims are rejected as non-statutory since they fail the machine-or-transformation test.

**Claim 18** fails to recite in the preamble a computer program that is embodied on a computer-readable medium. The claim is merely directed to a computer program or software per se. Proper format should resemble the following:

"A computer readable medium storing a computer program containing instructions thereon for instructing a computer to perform the steps of: ..."

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claim 18** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claim 18** recites a "storage device" "with a program of instructions" in the preamble of the claim. It is unclear as to whether the program is physically embodied on the device or is simply attached to the device in some tangible way. It is also unclear if the medium itself when read by a processor will be able to enable the initiation of a program method. Correction is requested.

## Claim Rejections - 35 USC § 102

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 10 and 14-17 are rejected under 35 U.S.C. 102(b) as being unpatentable over Ying Huang et al, Decision Support System For The Management Of An Agile Supply Chain (US 6,151,582, hereinafter Huang).**

**As to claim 10,** Huang teaches a method for defining custom user-specified events where such custom events can be defined using the system events that are based on the purchase transaction life cycle; and are further used for modeling payment terms that may consist of absolute amounts or percentage

of the order value (Huang, column 34, lines 15-19; column 35, line 60 to column

38, line 29; column 55, line 6-50; Appendix A, column 114, line 59 to column 115,

line 25; Promotions can be modeled in this way as well as forecasted sell-

through of the item which may be defined in the payment terms as outlined in the

database structure in the appendix).

**As to claim 14,** Huang teaches a system for optimizing supply channels

(Huang, Abstract), such a system comprising of an input device for modeling the

supply channels; a storage device for storing the supply channels; a problem

formulator to formulate the problem for optimization; an optimizer to solve the

problem; and an output device to review and analyze the results of the optimized

purchase schedules (Huang, figures 26 and 42; column 32, line 23 to column 34,

line 19; column 71, line 10 to line 91, line 7; This describes the I/O devices and

the linear programming algorithms).

**As to claim 15,** see the discussion of claim 14. Huang teaches a system

for optimizing supply channels (Huang, Abstract), such a system further

comprising a display device for displaying the supply channel modeling with

agreements and their attributes, and for displaying the optimized purchase

schedules (Huang, figure 42; The I/O devices).

**As to claim 16,** see the discussion of claim 14. Huang teaches a system

for optimizing supply channels (Huang, Abstract), wherein the supply channel

model describes the purchase agreements, items, vendors, shipping locations for

these vendors, requisitioning locations, pairs of valid combinations of these

locations with valid transportation modes for the purchase process (Huang,

column 32, line 23 to column 34, line 18; Replenishment planning).

**As to claim 17,** see the discussion of claim 14. Huang teaches a system

for optimizing supply channels (Huang, Abstract), wherein the optimizer is a

linear programmer or a mixed integer linear programmer (Huang, column 71, line

10 to column 91, line 7; This describes the linear programming algorithms).

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1,

148 USPQ 459 (1966), that are applied for establishing a background for

determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering

patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that

the subject matter of the various claims was commonly owned at the time any

inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor

and invention dates of each claim that was not commonly owned at the time a

later invention was made in order for the examiner to consider the applicability of

35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35

U.S.C. 103(a).

**Claims 1-9 and 11-13 are rejected under 35 U.S.C. 103(a) as being**

**unpatentable over Huang in view of Anson Jerome Gehman et al, System,**

**Method And Computer Program Product For Determining Product Supply**

**Parameters In A Supply Chain Management Framework (US 2003/0050823**

**A1, hereinafter Gehman), and in further view of Robert Baseman et al,**

**Method For Integrated Supply Chain And Financial Management, (US**

**6,671,673 B1, hereinafter Baseman).**

**As to claim 1,** Huang teaches a decision support method (and computer

process) for producing optimal purchase schedules (Huang, Abstract), the

method comprising the steps of:

a) Creating the supply channels models, said model defining attributes of

the supply channel including supply channel master data of items, requisitioning

sites, vendors, vendor sites, transport modes; supply agreement parameters; and

corporate business rules (Huang, column 7, line 36 to column 11, line 16; column

32, line 23 to column 34, line 18; Data structures and replenishment planning);

b) Creating the scope for planning, define optimization configurations,

formulating linear programming and mixed integer linear programming models

based on the created supply channel models, and run the optimizer (Huang,

column 2, lines 7-19; column 27, lines 40-45; column 86, lines 10-28; column 87,

lines 20-25; Cost optimization modeling using linear programming and mixed

integer linear programming);

c) Analyzing the output purchase schedules that may consist of real and

virtual planning scenarios, through analysis of the purchases costs; basic prices;

contractual obligations, rebates and penalties; fulfillment; and schedule

compliance to contractual terms (Huang, column 27, lines 60-67; column 28,

lines 53-59; column 32, lines 24-32; column 62, lines 4-17; column 97, line 26 to

column 98, line 50; column 121, lines 1-20);

d) Huang teaches monitoring contract parameters and performance

(Huang, column 12, lines 18-50; column 32, line 34 to column 33, line 16; column

35, lines 6-19), but does not specifically teach strict compliance and auditing

procedures. Gehman teaches compliance and auditing, further analyzing the

enterprise's own compliance on purchase quantities and flex limits; payment

terms; and lead time provided for order processing, supply and transportation;

costs and taxes; and basic prices; before the purchase schedules are finalized as

orders and sent to the vendor (Gehman, paragraphs 270, 359, 553, 562, 563,

756, 807, 838, 1570-1573, and figure 147; Contract compliance and order

processing).

Neither Huang nor Gehman teaches general tax management regarding

vendor selection. Baseman teaches general tax management (tactical) which

considers supply and transportation costs and taxes regarding vendor selection

and contract management (Baseman, column 11, lines 40-67; column 15, line 38

to column 16, line 4).

It would have been obvious to one of ordinary skill in the art at the time of invention to have modified the invention of Huang to have included the features as taught by Gehman and Baseman since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

**As to claim 2,** see the discussion of claim 1. Huang teaches a decision support method (and computer process) for producing optimal purchase schedules (Huang, Abstract), wherein the step of creating a supply channel model further comprises of the following steps:

a) Creating a supply agreement by identifying a vendor, items covered for supply in this agreement, identify vendor ship locations, identify receiving locations, and other parameters of effective dates, payment terms, compliance requirements for lead-times for order processing, manufacture and transportation; maintaining versions and activating (Huang, column 32, line 23 to column 37, line 21; Replenishment planning);

b-1) Modeling the basic price that may be modeled as fixed unit price, (Huang, column 115, lines 15-20).

c) Model costs other than the basic price, where such costs may be modeled as an absolute value, as a percentage of another cost definition, as a percentage of basic price, as a function of the quantity, as a function of the transportation route specifying a shipment origin and destination pair, costs that

are a combination of absolute values and percentage of another cost or basic

price (Huang, column 27, lines 60-67; column 30, lines 40-45; column 34, lines

30-63);

      d) Associate the costs thus modeled either at the agreement level, or at a

line item level where these line items are individual items that are identified for

supply in the agreement (Huang, column 34, lines 20-29);

      e) Define specific planning time buckets referenced as frozen and

collaboration periods each allowing the user to specify collaboration parameters

with the vendor with whom the agreement is being modeled (Huang, column 34,

lines 15-18; column 113, line 40 to column 114, line 67; The promotion calendar

and other calendars associated with a component requirement), these

parameters being the up and down flex percentages on the projected quantity

demands during the future time periods, and the duration of the frozen and

collaborative time buckets; and may be specified for the whole agreement, at the

line-item level, or the requisitioning site and item level (Huang, column 36, line 30

to column 37, line 21);

      f) Select system events based on purchase transaction life cycle

milestones that are defined and provided by the system, and/or define user

events by specifying the direction and duration in days from the selected system

event (Huang, column 36, lines 5-29);

      h) Create capacity calendars for vendor sites when no supplies can be

made and associate these calendars with the specific vendors (Huang, column

122, lines 20-40; Data structures shows the relationships between calendars,

materials, and vendors);

i) Create receiving location calendars when no receipts can be made and

associate these calendars with the specified receiving location (Huang, column

117, lines 25-45);

j) Specify agreement terms on quantities for lot sizes, minimum order

quantity, and maximum order quantity for the orders placed under the agreement

reference (Huang, column 138, lines 25-40);

k) Model supply network by providing receiving locations, supplying

locations and transportation modes, and specifying the valid combinations of the

three for the specified agreement (Huang, column 33, line 21 to column 34, line

19);

l) Specify ordering related parameters of order handling or processing

time, maximum number of orders that would be processed free by the vendor

under the agreement, order handling fee after the maximum number of free

orders has been reached under the said agreement (Huang, column 33, line 27

to column 34, line 19);

m) Model and specify lead times related to transportation lead time

between the supplying and receiving locations; order processing lead time for a

specific agreement; manufacturing or supply lead time; and expedited lead times

for each of the above situations when expedite fee is specified and paid (Huang,

column 33, line 27 to column 34, line 19);

n) Model supplier capacities for different items, or for supply-site and item combinations (Huang, column 37, lines 47-53);

p) Specify available rebates under the agreement when a particular business volume has been achieved; such rebate point being defined either by value at the agreement or a line-item level; or by value or quantity at the line-item level; and rebate itself being either in absolute currency value and/or percentage of currency value of business volume above rebate point; and such rebates being fixed over time, or variable through time (Huang, column 115, lines 10-26);

s) Marking the status of the agreement as active to indicate to the system that the agreement can be included in optimization runs as a potential supply channel (Huang, column 34, line 64 to column 35, line 5);

b.2) Huang does not explicitly discuss time varying pricing but does have a database setup for changing pricing based on different volumes of material or goods (Huang, column 115, lines 10-25).

Gehman teaches modeling basic price on volume based discounting structure, fixed unit price varying by time, formula based pricing using one or more parameter that changes with time, formula based pricing using one or more parameter that changes with time and where the computing formula itself may change with time (Gehman, figures 43C, 43D, 107 and 118);

o) Huang does not specifically teach obligations and penalties, but does teach general contract terms (Huang, column 34, line 29 to column 35, line 5).

Gehman teaches specifying obligations and penalties when these obligations are not met; obligations being specified in quantities at line-item level,

or currency values at agreement, or individual line-item levels; penalties in

absolute value, and/or percentage of shortness on obligation; both obligations

and penalties being thus modeled either to be constant through time or varying

with time (Gehman, figures 30-35; paragraphs 359-364); .

g) Gehman teaches defining payment terms by using the above events,

either modeling an absolute amount to be paid associated with an event, or a

percentage of expected value of the purchase schedule; or by associating a pre-

defined payment term from another agreement that may either be a parent

agreement or an independent agreement with same or another vendor

q) Gehman teaches specifying corporate policy for achieving a

recommended business split among multiple potential vendors for supplying the

same item (Gehman, paragraph 1627);

r) Neither Huang nor Gehman models foreign exchange rates and

corporate home currency transactions. Baseman teaches modeling corporate

home currency; and other currencies that the enterprise might use; and model

exchange rates among multiple currencies modeled; and specify the default

currency for financial dealings on the specified agreement (Baseman, column 6,

lines 1-32; column 8, line 51 to column 9, line 5; Foreign exchange and vendor

selection and the effects of currency transactions on profit and taxes).

It would have been obvious to one of ordinary skill in the art at the time of

invention to have modified the invention of Huang to have included the features

as taught by Gehman and Baseman since the claimed invention is merely a

combination of old elements, and in the combination each element merely would

have performed the same function as it did separately, and one of ordinary skill in

the art would have recognized that the results of the combination were

predictable.

As to claim 3, see the discussion of claim 1. Huang in view of Gehman

and Baseman teaches a decision support method (and computer process) for

producing optimal purchase schedules (Huang, Abstract), wherein the step of

creating the scope for planning, defining optimization configurations and running

the optimizer further comprises of the following steps:

a) Creating planning groups by grouping items together manually; and the

system further expanding the scope of the items in the group for a given

optimization run automatically (Huang, figure 15; column 25, lines 6-55);

b) Create a planning calendar specifying the plan start and end dates, and

dividing the intervening time into buckets of time each individually identified, and

of individual duration that may be in days, weeks, months, quarters or years

(Huang, figure 58; appendix A; column 109, lines 31-61; Calendars are used in

the database to define the time buckets referred to by Applicant);

c) Associating a default planning calendar for each item group created

(Huang, figure 58; A promotion calendar could be a default calendar);

d) Modeling a earliest release date specifying to the optimizer the first date

when the purchase schedule can be generated (Huang, column 36, lines 30-43);

e) Specifying the scope of the problem either through a template or

independent of it, such a scope consisting of the requisitioning sites and

requisitioned items combinations (Huang, column 32, line 23 to column 34, line 18; Replenishment);

f) Defining the optimization configurations by specifying the following , parameters of the optimizer solver; number of supply expedite lead-time buckets, being the number of buckets through which the material can be ordered in advance; lot-size multiple constraint horizon, being the point in horizon through which the lot-sizing rules must be applied on the generated system output; minimum lot size constraint horizon, being the point in horizon through which the minimum order lot-size rules must be applied on the generated system output; flag for allowing shortness either by lot size multiple or minimum lot size; flag for ignoring prices and costs (Huang, column 35, line 60 to column 38, line 22; columns 61-90 inclusive; The details of the optimizations and models are given here and sell-through forecasting);

g) Specifying the optimization execution parameters either by providing parameters for automatically scheduling the process or manually executing the optimization process (Huang, column 32, line 23 to column 34, line 18; This outlines the data structures and model for replenishment).

**As to claim 4,** see the discussion of claim 3. Huang in view of Gehman and Baseman teaches a decision support method (and computer process) for producing optimal purchase schedules (Huang, Abstract), wherein the step of creating the scope for planning, defining optimization configurations and running the optimizer further comprises, to automatically expand the scope of the planning item groups to include other items that are related through supply

contracts conditions of common obligations, penalties, and rebate values where

such commonality affects the procurement costs, and therefore optimal

purchasing solution (Huang, column 34, line 20 to column 35, line 5; A product

group is one category).

**As to claim 5,** see the discussion of claim 1. Huang in view of Gehman

and Baseman teaches a decision support method (and computer process) for

producing optimal purchase schedules (Huang, Abstract), the method comprising

the step to formulate linear programming and mixed integer linear programming

problems, where in the parametric values required for problem formulations are

computed, these being as follows: automatic computation of consolidated need

quantities for each time bucket in the planning horizon; automatic computation of

consolidated supplier capacity for each time bucket in the planning horizon;

automatically computing the pro-rated obligations and rebates effective for the

planning horizon when such horizon ends before the effective end date of the

contracts; automatic computation of the effective landed price in each planning

bucket when prices vary by time; and automatically considering any excess

quantities planned to be purchased in previous buckets and compensating for

such excess quantities (Huang, column 71, line 10 to column 91, line 7; Vendor

managed replenishment);

**As to claim 6,** see the discussion of claim 1. Huang in view of Gehman

and Baseman teaches a decision support method (and computer process) for

producing optimal purchase schedules (Huang, Abstract), the method comprising

the step for computing the compliance scores for each individual purchase

schedule by measuring such compliance against the agreement parameters of
the basic price; other costs covered and modeled in the agreement;
transportation routes; lot-size multiple; order lot size; payment and credit terms;
lead time for order processing and order acknowledgements; order fulfillment on
time and quantity ordered; lead time for supply; lead time for transportation;
expedite lead time requests; and expedite process fees when such fees is due
(Huang, column 35, lines 6-60; Contract parameter monitoring).

**As to claim 7,** see the discussion of claim 1. Huang in view of Gehman
and Baseman teaches a decision support method (and computer process) for
producing optimal purchase schedules (Huang, Abstract), the method
comprising the step for creating, maintaining and comparing the scenarios in
which virtual agreements have been modeled for the purpose of evaluating the
effects of such agreements on existing supply situations, projected purchase
costs and agreement terms (Huang, column 34, line 19 to column 35, line 5;
Strategic planning).

**As to claim 8,** Huang in view of Gehman and Baseman teaches a
method (and computer process) for computing effective landed cost. Huang
does not teach time varying pricing for computing effective landed cost.
Gehman teaches a method for computing effective landed cost where one
component of such landed cost computation is basic price that varies with time
(Gehman, figures 56, 128, 144; paragraph 1562).

Neither Huang nor Gehman teaches time adjusted formulas or external
variables. Baseman teaches a formula that itself can change with time, as well

as use an external variable that may be dependent on time for its value

(Baseman, column 9, line 39 to column 10, line 10; Foreign exchange rates can

change over time and hence change the cost and profitability formula).

It would have been obvious to one of ordinary skill in the art at the time of

invention to have modified the invention of Huang to have included the features

as taught by Gehman, and Baseman since the claimed invention is merely a

combination of old elements, and in the combination each element merely would

have performed the same function as it did separately, and one of ordinary skill in

the art would have recognized that the results of the combination were

predictable.

**As to claim 9,** see the discussion of claim 8. Huang in view of Gehman

and Baseman teaches a method (and computer process) for computing effective

landed cost, where components of such landed cost computation are costs that

are a function of one or more of the basic price; time; quantity; transportation

route defined as a pair of shipping location and requisitioning location; and can

be a combination of absolute value and/or percentage of another cost (Huang,

column 33, line 26 to column 34, line 39; Appendix A; VMR setup and cost

computations).

**As to claim 11,** see the discussion of claim 5. Huang in view of Gehman

and Baseman teaches a decision support method (and computer process) for

producing optimal purchase schedules (Huang, Abstract), the method for

computing the pro-rated rebates, obligations and penalties when such

obligations and penalties vary with time during the plan horizon; and/or when the

contract effective end-dates are beyond the modeled planning horizon (Huang, column 36, line 60 to column 38, line22; columns 44-50; column 71, line 10 to column 91, line 7; The linear programming model and time series forecasting and sell-through).

As to claim 12, see the discussion of claim 1. Huang in view of Gehman and Baseman teaches a decision support method (and computer process) for producing optimal purchase schedules (Huang, Abstract), the method for formulating linear programming and mixed integer linear programming models, where in the costs based on quantity basis greater than 1 are solved in two iterations; the costs being converted to a quantity basis of 1 in the first iteration model, and being modeled with the actual quantity basis along with tighter bounds for integer variables, in the second iteration (Huang, column 71, line 10 to column 91, line 7; Linear programming models that use conventional algorithms that bootstrap, limit or modify parameters with constraints in limited iterations are old and well known and do not comprise a patentable limitation).

As to claim 13, see the discussion of claim 1. Huang in view of Gehman and Baseman teaches a decision support method (and computer process) for producing optimal purchase schedules (Huang, Abstract), the method for formulating linear programming and mixed integer linear programming models, where in the models with lot sizing restrictions are solved in two iterations; the lot sizing restrictions being ignored in the first iteration and the same being considered in the second iteration using a reformulated model based on the solution from the first iteration (Huang, column 71, line 10 to column 91, line 7;

Linear programming models that use conventional algorithms that bootstrap,

limit or modify parameters with constraints in limited iterations are old and well

known and do not comprise a patentable limitation).

**Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable**

**over Huang in view of Gehman, Baseman, and in further view of Danneels**

**et al, Dynamic Linking Of Supplier Web Sites To Reseller Web Sites, (US**

**6,272,472 B1, hereinafter Danneels).**

**As to claim 18,** this claim repeats the subject matter of claim 1 for

program code embedded on a computer-readable medium. Huang in view of

Gehman and Baseman discloses the invention substantially as claimed. None of

the references explicitly teaches providing executable instructions on a machine-

readable medium. Danneels teaches a computer-implemented method realized

as one or more programs on a computer (Danneels, column 2, lines 40-46). In

addition, Danneels teaches that the programs are storable on a machine-

readable medium such as a floppy disk or a CD-ROM (Danneels, column 2, lines

46-49). One of ordinary skill in the art would have been motivated to incorporate

this feature for the purpose of distribution and installation and execution of the

software on another computer (Danneels, column 7, lines 46-49). As the

underlying processes have been shown to be fully disclosed by the teachings of

Huang, Gehman and Baseman in the above rejection of claim 1, it is readily

apparent that their teachings perform the recited functions as outlined in claim

18. As such, these limitations are rejected for the same reasons provided in the

rejection of claim 1 and are incorporated herein.

It would have been obvious to one of ordinary skill in the art at the time of

invention to have modified the invention of Huang to have included the features

as taught by Gehman, Danneels, and Baseman since the claimed invention is

merely a combination of old elements, and in the combination each element

merely would have performed the same function as it did separately, and one of

ordinary skill in the art would have recognized that the results of the combination

were predictable.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from

the examiner should be directed to JOHN ZELANO whose telephone number is

(571)270-7047. The examiner can normally be reached on Monday through

Friday, 7:30AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Beth Boswell can be reached on 571-272-6737. The fax

phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.


/JOHN ZELANO/
Examiner, Art Unit 3623
2/7/2009


/Beth V. Boswell/

Supervisory Patent Examiner, Art Unit 3623